



UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

And

MT

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/289,600 04/12/99 YAMAGUCHI

A 053967

WM01/0911
SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVE NW
WASHINGTON DC 20038-3202

EXAMINER

LESPERANCE, J

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED:

09/11/01

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/289,600

Applicant(s)
Akira Yamaguchi

Examiner
Jean Lesperance

Art Unit
2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 20, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Art Unit: au 2674

DETAILED ACTION

1. Claims 1-31 are presented for examination.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103 (a) as being unpatentable over patent # 5,872,554 ("Chang et al.") in view of patent # 6,091,396 ("Minami et al.").

As for claims 1-31, Chang et al. teach the grayscale image is divided into a sequence of pages of image data each having an array of dots equal to the resolution of the grayscale image such that each pixel on the grayscale image corresponds to a sequence of dots respectively on the corresponding location on the N-1 pages of image data (abstract) corresponding to a display device comprising a plurality of picture elements, each picture element comprising a series of cells, each cell expressing tones in multiple levels; the FR and FP signals are used for screen display synchronization, the LP signal for row synchronization that generates a pulse at the start of the scanning of each row, and the SCP signal for shift clock synchronization that provides a series pulses for the synchronization of the display of each (page Fig.5) (column 5, lines 36-42); wherein each cell of said series of cells emits light in the same color(Fig.1), wherein the output

Art Unit: au 2674

luminance of the plurality of picture elements express said monochromatic image (column 2, lines 34-55). Accordingly, Chang et al. teach all the claimed limitations as recited in claims 1-31 with exception of providing the output luminance of the cell, the flat panel, and the CIE chromaticity diagram.

However, Minami et al. teach a PDP Fig.1 (7) corresponding to a flat panel display system, the plurality of sub-fields having a high relative ratio of luminescent time are arranged in a time sequence in a descending or ascending order (abstract) corresponding to the output luminance of the cells. And the CIE chromaticity diagram is a standard diagram that is well known in the art and the range of maximum luminance is the standard they use in the military and is also well known in the art.

It would have been obvious to the PDP, the output luminance of the cells as taught by Minami et al. in the non-blinking displaying system disclosed by Chang et al. because this would allow the provision of a gradation display while reducing a dynamic false contour.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

Any response to this action should be mailed to:

Art Unit: au 2674

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

Jean Lesperance



Date 9-6-2001

Art Unit 2674



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600